

Amendments to the claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims

1. (Canceled)
2. (Currently amended) A polyamide acid resin (A) containing an unsaturated group obtained by reacting an unsaturated group-containing polyester resin (a) having a terminal anhydride group, which is obtained by reacting a polyol compound (c) containing an unsaturated group and a tetrabasic acid dianhydride (d), and a compound (b) having two amino groups in a molecule.
3. (Original) The polyamide acid resin (A) containing an unsaturated group according to claim 2, wherein a polyol compound (c) containing an unsaturated group is a compound obtained by reacting a compound (e) having at least two glycidyl groups in a molecule with a monocarboxylic acid (f) having an ethylenic unsaturated group in a molecule.
4. (Previously presented) The polyamide acid resin (A) containing an unsaturated group according to claim 3, wherein a compound (e) having at least two glycidyl groups in a molecule is (1) a bisphenol-type epoxy resin, (2) a straight chain or cyclic (C2 to C10) aliphatic polyvalent

glycidyl ether, provided that the number of a glycidyl group is 2 to 5, and the number of carbon atoms in the case of a cyclic ether is at least 3, (3) a polysulfide type diglycidyl ether, or (4) a biphenol-type diepoxy compound, and in addition, a monocarboxylic acid (f) having an ethylenic unsaturated group in a molecule is a (C3 to C6) aliphatic monocarboxylic acid containing an ethylenic unsaturated group which may be substituted with a phenyl group.

5. (Original) The polyamide acid resin (A) containing an unsaturated group according to claim 3, wherein a compound (e) having at least two glycidyl groups in a molecule is a compound selected from a group of a phenyl diglycidyl ether compound, a bisphenol-type diepoxy compound, a hydrogenated bisphenol-type diepoxy compound, a halogenated bisphenol-type diepoxy compound, an alicyclic diepoxy compound, an aliphatic diglycidyl ether compound, a polysulfide-type diglycidyl ether compound and a biphenol-type diepoxy compound.

6. (Original) The polyamide acid resin (A) containing an unsaturated group according to claim ~~4 or claim 5~~, wherein a monocarboxylic acid (f) having an ethylenic unsaturated group in a molecule is (meth)acrylic acid or cinnamic acid.

7. (Currently amended) The polyamide acid resin (A) containing an unsaturated group according to ~~any one of claims 2 to 6~~ claim 3, wherein a tetrabasic acid dianhydride (d) is a tetrabasic acid dianhydride selected from a group consisting of pyromellitic dianhydride, ethylene glycol-bis(anhydrotrimellitate), glycerin bis(anhydrotrimellitate) monoacetate, 1,2,3,4-butanetetracarboxylic dianhydride, 3,3'4,4'-diphenylsulfonetetracarboxylic dianhydride, 3,3'4,4'-benzophenonetetracarboxylic dianhydride, 3,3'4,4'-biphenyltetracarboxylic dianhydride, 3,3'4,4'-diphenylethertetracarboxylic dianhydride, 2,2-bis(3,4-anhydrodicarboxyphenyl)propane, 2,2-bis(3,4-anhydrodicarboxyphenyl)hexafluoropropane, 5-(2,5-dioxotetrahydro-3-furanyl)-3-methylcyclohexene-1,2-dicarboxylic anhydride, and 3a,4,5,9b-tetrahydro-5-(tetrahydro-2,4-dioxo-3-furanyl)-naphtho[1,2-c]furan-1,3-dione.

8. (Currently amended) The polyamide acid resin (A) containing an unsaturated group according to ~~any one of claims 2 to 7~~ claim 3, wherein a compound (b) having two amino groups in a molecule is a compound selected from a group consisting of 4,4-diaminodiphenylmethane, 3,4'-diaminodiphenylmethane, 4,4'-diaminodiphenylether, 3,4'-

diaminodiphenylether, 4,4'-diaminodiphenylsulfone, 3,4'-diaminodiphenylsulfone, 4,4'-diaminobenzophenone, and 3,4'-diaminobenzophenone.

9. (Currently amended) The polyamide acid resin (A) containing an unsaturated group according to ~~any one of claims 2 to 6~~ claim 3, wherein equivalent of an ethylenic unsaturated group of a polyamide acid resin (A) containing an unsaturated group is 300 to 2,000 g/equivalent.

10. (Currently a mended) The polyamide acid resin (A) containing an unsaturated group according to ~~any one of claims 2 to 8~~ claim 3, wherein equivalent of a carboxyl group of a polyamide acid resin (A) containing an unsaturated group is 200 to 1,500 g/equivalent.

11. (Currently amended) A method for producing a polyamide acid resin (A) containing an unsaturated group according to ~~any one of claims 2 to 10~~ claim 3, characterized by reacting a polyol compound (c) containing an unsaturated group, which is a reaction product of a compound (e) having at least two glycidyl groups in a molecule and a monocarboxylic acid (f) having an ethylenic unsaturated group in a molecule, and a tetrabasic acid dianhydride (d) to yield an unsaturated group-containing polyester resin (a) having a terminal anhydride group, which is then

reacted with a compound (b) having two amino groups in a molecule.

12. (Original) The method for producing the polyamide acid resin (A) containing an unsaturated group according to claim 11, wherein a compound (e) having at least two glycidyl groups in a molecule is a bisphenol-type diepoxy compound, or a biphenol-type diepoxy compound; a monocarboxylic acid (f) having an ethylenic unsaturated group in molecule is acrylic acid; a tetrabasic acid dianhydride (d) is pyromellitic dianhydride or 3,3',4,4'-benzophenone tetracarboxylic dihydride; and a compound (b) having two amino groups in a molecule is 3,4'-diaminodiphenyl ether.

13. (Currently amended) A photosensitive resin composition characterized by containing the polyamide acid resin (A) containing an unsaturated group according to any one of claims 2 to ~~12~~ 4, a crosslinker (B) and a photopolymerization initiator (C).

14. (Currently amended) The photosensitive resin composition characterized by containing the polyamide acid resin (A) containing an unsaturated group according to any one of claims 2 to ~~12~~ 4, a crosslinker (B), a photopolymerization initiator (C), and a component (D) to be cured.

15. (Currently amended) A cured product of the photosensitive resin composition according to claim ~~13~~ or ~~claim-14~~.

16. (Original) A substrate having a layer of the cured product according to claim 15.

17. (Original) An article having the substrate according to claim 16.

18. (New) The polyamide acid resin (A) containing an unsaturated group according to Claim 4, wherein a compound (e) having at least two glycidyl groups in a molecule is a compound selected from a group of a phenyl diglycidyl ether compound, a bisphenol-type diepoxy compound, a hydrogenated bisphenol-type diepoxy compound, a halogenated bisphenol-type diepoxy compound, an alicyclic diepoxy compound, an aliphatic diglycidyl ether compound, a polysulfide-type diglycidyl ether compound and a biphenol-type diepoxy compound, a monocarboxylic acid (f) having an ethylenic unsaturated group in a molecule is (meth)acrylic acid or cinnamic acid, a tetrabasic acid dianhydride (d) is a tetrabasic acid dianhydride selected from a group consisting of pyromellitic dianhydride, ethylene glycol-bis(anhydrotrimellitate), glycerin bis(anhydrotrimellitate) monoacetate, 1,2,3,4-butanetetracarboxylic dianhydride, 3,3',4,4'-diphenylsulfonetetracarboxylic

dianhydride, 3,3',4,4'-benzophenonetetracarboxylic dianhydride, 3,3',4,4'-biphenyltetracarboxylic dianhydride, 3,3',4,4'-diphenylethertetracarboxylic dianhydride, 2,2-bis(3,4-anhydrodicarboxyphenyl)propane, 2,2-bis(3,4-anhydrodicarboxyphenyl)hexafluoropropane, 5-(2,5-dioxotetrahydro-3-furanyl)-3-methylcyclohexene-1,2-dicarboxylic anhydride, and 3a,4,5,9b-tetrahydro-5-(tetrahydro-2,4-dioxo-3-furanyl)-naphtho[1,2-c]furan-1,3-dione, and a compound (b) having two amino groups in a molecule is a compound selected from a group consisting of 4,4'-diaminodiphenylmethane, 3,4'-diaminodiphenylmethane, 4,4'-diaminodiphenylether, 3,4'-diaminodiphenylether, 4,4'-diaminodiphenylsulfone, 3,4'-diaminodiphenylsulfone, 4,4'-diaminobenzophenone, and 3,4'-diaminobenzophenone.